

REMARKS

I. Status of Claims

Upon entry of the Amendment, which is respectfully requested, claims 1-8 will be pending in the application.

Claims 1, 2 and 4 are amended. The claims have been amended based on the disclosure beginning at paragraph [0010] of the present specification and to resolve issues raised by the Examiner under 35 U.S.C. 112.

Claims 7 and 8 are added. Support for claims 7 and 8 can be found at least at paragraphs [0009], [0026] and [0027] of the present specification.

Entry of the above amendment is respectfully requested.

II. Information Disclosure Statement

Applicants note that an Information Disclosure Statement was filed on August 12, 2008. Applicants respectfully request that the Examiner consider the disclosed information and return an initialed copy of the PTO/SB/08 form with the next communication from the PTO.

III. Response to Rejection Under 35 U.S.C. § 112

Claims 1-2 and 4 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite.

Applicants respectfully traverse.

With respect to claim 1, Applicants respectfully submit that the present specification discloses with enough specificity what is meant by “low-pressure” such that one of ordinary skill in the art would be reasonably apprised of the scope of the invention. See, e.g., paragraph [0019]

of the present specification, which discloses an inventive embodiment wherein the initial pressure is 800 kPa. Additionally, Figures 4 and 5 demonstrate the effect of the initial pressure on the spew length and the protrusion length, respectively, wherein the initial pressure is varied from 0.5 to 1.7 MPa. Furthermore, working Example 1 discloses an initial pressure less than 1.0 MPa and that a conventional vulcanization-molding process typically utilizes an initial pressure of 1.7 MPa. See also working Example 2 in the present specification.

Applicants further submit that the §112 rejections of claims 2 and 4 are overcome based on the present amendments to the claims.

In view of the above, Applicants respectfully request reconsideration and withdrawal of the §112 rejections of claims 1-2 and 4.

IV. Response to Rejection Under 35 U.S.C. § 102

A. Claims 1-6 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Arimatsu (JP-61084211).

Applicants respectfully traverse.

Amended claim 1 recites a method of vulcanization-molding a rubber material by heating a vulcanization mold and pushing the rubber material onto a shaping face of the mold through a pressure supplied to an interior of the mold, supplying a low-pressure fluid to the interior of the mold at an initial stage of the vulcanization molding and after a start of vulcanization of the rubber material the pressure of the fluid is increased stepwise or stepless.

Using standard vulcanization techniques, long vent-spews, protrusions and the like are generated in the rubber product, because high pressure is supplied to the easily fluidizable rubber material before the start of the vulcanization. In contrast, in the present invention, vent-spews,

protrusions and the like generated in the rubber product can be suppressed by increasing the pressure of the fluid after the vulcanization of the rubber material starts.

Arimatsu discloses that a gas having a low heat capacity is mixed with a thermofluid having a high heat capacity and pressure and temperature of the mixed fluid are controlled so that they can agree to each pre-set condition. However, Arimatsu does not disclose the timing of changing the pressure and temperature and does not disclose specific conditions for preventing the formation of long vent-spews, protrusions and the like.

In view of the above, Applicants respectfully submit that Arimatsu does not teach or suggest each and every element of amended claim 1. Claim 1 is therefore distinguishable over Arimatsu. Claims 2-8 are also distinguishable over Arimatsu, at least by virtue of their dependence from claim 1.

Applicants therefore respectfully request reconsideration and withdrawal of the §102 rejection of claims 1-8 based on Arimatsu.

B. Claims 1 and 5 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Ono (U.S. Patent Application Publication No. 2001/0054782).

Applicants respectfully traverse.

Ono does not disclose that the low-pressure fluid is supplied to the interior of the mold at the initial stage of the vulcanization molding, and the pressure of the fluid is increased after the vulcanization of the rubber material starts.

As discussed above, a characteristic feature of the presently claimed invention is that vent-spews, protrusions and the like generated in the rubber product can be suppressed by increasing the pressure of the fluid after the vulcanization of the rubber material starts.

Therefore, Ono does not teach each and every element of amended claim 1, and therefore claim 1 is distinguishable over Ono. Claim 5 is also distinguishable over Ono, at least by virtue of its dependence from claim 1.

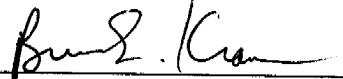
In view of the above, Applicants respectfully request reconsideration and withdrawal of the §102 rejection of claims 1 and 5 based on Ono.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Bruce E. Kramer
Registration No. 33,725

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: September 11, 2008